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PATENT  
Customer No. 22,852  
Attorney Docket No. 02481.1743

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: )  
)  
E. UHLMANN et al. ) Group Art Unit: 1645  
)  
Application No.: 09/835,371 ) Examiner: SIEW  
)  
Filed: April 17, 2001 ) Charles Hall, Office of Publications  
) P/OPPD  
For: POLYAMIDE NUCLEIC ACID ) Bldg. PK3, Room 09-B910  
)  
DERIVATIVES AND AGENTS )  
AND PROCESSES FOR )  
PREPARING THEM )

Commissioner for Patents  
Washington, DC 20231

Sir:

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**REQUEST FOR CORRECTED PATENT APPLICATION**  
**PUBLICATION UNDER 37 C.F.R. § 1.221(b)**

On December 12, 2002, the Office published the above-identified application No. 09/835,371 as Publication No. US 2002/0187473 A1. The published application contains a mistake that might be material and that is the fault of the Office. Attached hereto is a copy of the relevant page of the originally-filed application and a marked-up copy of the corresponding page of the published application containing the mistake. A mistake is material when it affects the public's ability to appreciate the technical disclosure of the patent application publication or determine the scope of the provisional rights that Applicants may seek to enforce upon issuance of a patent. See 37 C.F.R. § 1.221(b).

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The mistake, which is indicated in red ink on the relevant page of the marked-up copy of the published application attached hereto, is as follows:

On Page 14, in paragraph 142, the structure of PNA-6 erroneously contains a negative charge on two oxygen molecules of a phosphate group, whereas it should contain only one. This mistake may create an ambiguity, affecting the public's ability to appreciate the technical disclosure of the patent application publication or determine the scope of the provisional rights that Applicants may later seek to enforce. For at least this reason, this mistake is material and accordingly should be corrected.

For at least the foregoing reason, Applicants request that the Office correct the above-identified material mistake in the published application, which was the fault of the Office. Further, Applicants request that the Office forward a copy of the corrected published application, or at least a notification of the occurrence or predicted occurrence of the corrected publication, once it has been corrected.

Applicant believes that no Petition or fee is due in connection with this Request. However, if any Petition or fee is due, please grant the Petition and charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: February 7, 2003

By: 

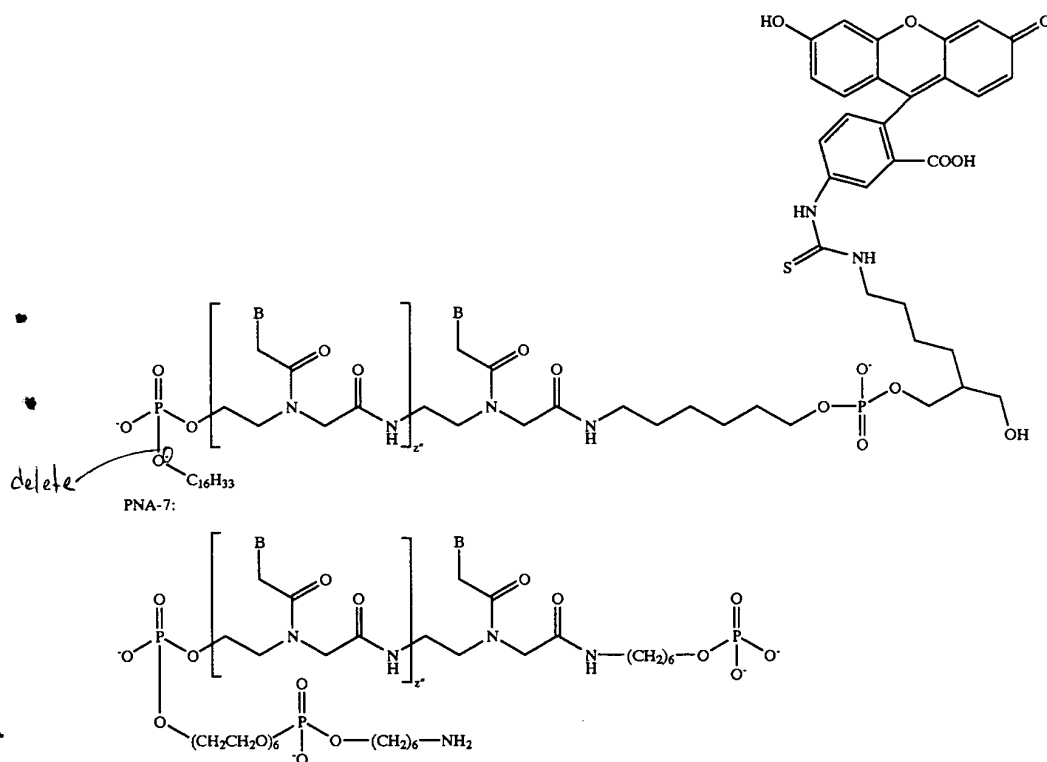
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-continued

**PNA-6:**



[0143] wherein the sequences of the 13 bases are in each case described by SEQ ID NO:53, and z" in each case is 10:

SEQ ID NO:53

5' -TATTCCGTCAT-3'

**[0144]** (PNA-1 to PNA-7)

### Example 1

## Synthesizing the PNA Chain

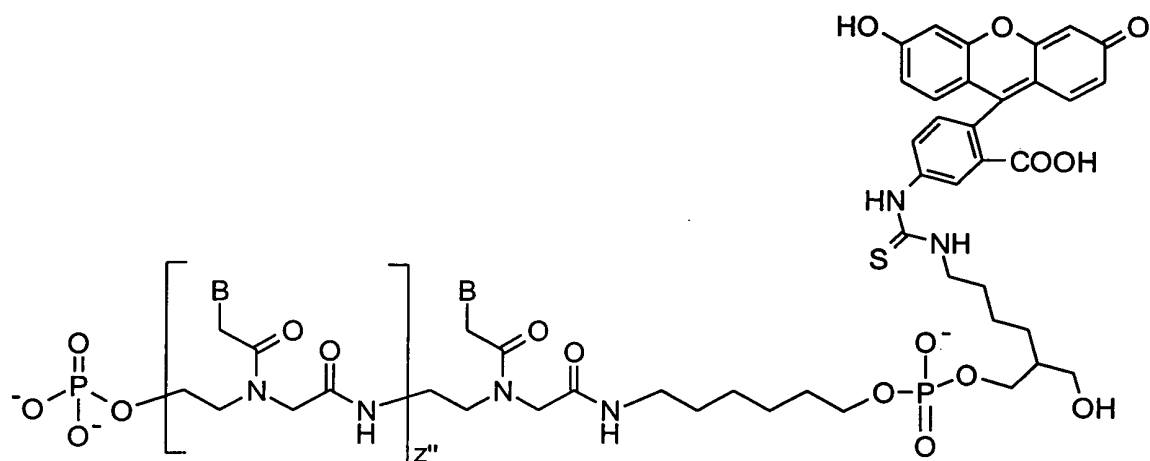
**[0145]** The following reagents were used for preparing the PNA moiety:

- [0146] 1. Phosphoramidite reagent (0.1 M in acetonitrile (ACN))
- [0147] 2. Mmt-PNA monomers and/or Dmt-og-PNA monomers (0.2 M in DMF:ACN (1:1; v:v))
- [0148] 3. Anhydrous ACN ( $\leq 30$  ppm of water)
- [0149] 4. Trichloroacetic acid (3%) in dichloromethane (DCM)
- [0150] 5. Acetic anhydride, 2,6-lutidine in THF (1:1:8; v:v:v); (Cap A)

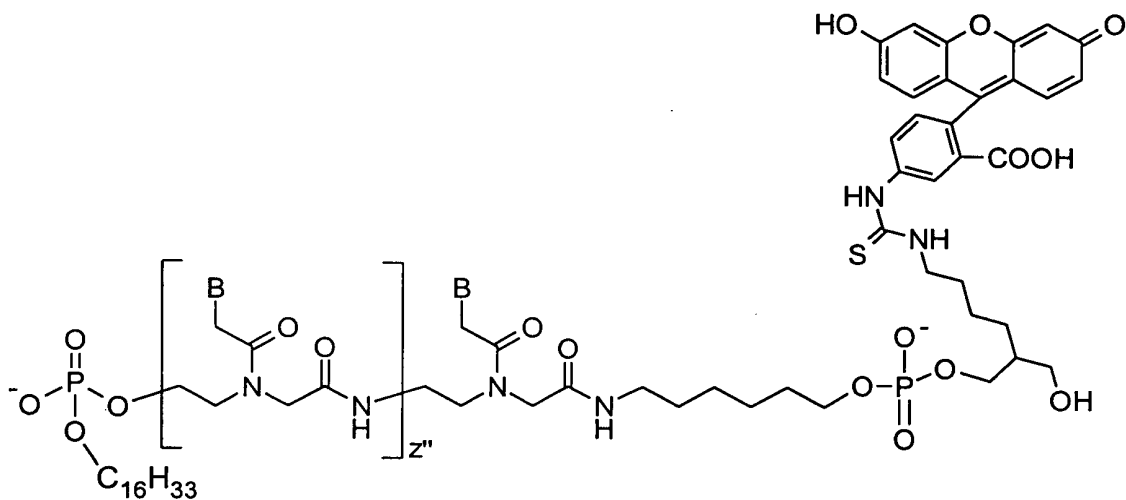
- [0151]** 6. N-Methylimidazole (16%) in THF; (Cap B)  
**[0152]** 7. Iodine solution (0.05 M) in THF, water, pyridine (7:2:1; v:v:v)  
**[0153]** 8. Washing solution (THF, water, pyridine (7:2:1; v:v:v))  
**[0154]** 9. Tetrazole (0.3 M) in ACN  
**[0155]** 10. HBTU; 0.2 M in DMF:ACN (1:1; v:v)  
**[0156]** 11. DIPEA; 0.2 M in DMF:ACN (1:1; v:v)  
**[0157]** 12. DMF (>99.5%)  
**[0158]** 13. Solid phase support: aminopropyl-CPG (550 Å) loaded with Mmt-amino-hex-1-yl hemisuccinate (for PNA-hexylamides).

[0159] The Mmt/acyl-protected or Dmt/acyl-protected oeg monomers were prepared as has already been described (Breipohl et al. (1997) Tetrahedron 53, 14671-14686). The loading of aminopropyl-CPG with the Mmt-aminohex-1-yl hemisuccinate has likewise already been described (Will et al. (1995) Tetrahedron 51, 12069-12082). The derivatized CPG supports are commercially available (Glen Research Corporation, Sterling, Va. 20164, U.S.A.). The PNA syntheses were in general carried out on a scale of from 2 to 5  $\mu$ mol.

PNA-5:



PNA-6:



PNA-7:

